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NEWS
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                 "Ask CAS" for self-help around the clock
NEWS
                 INSPEC enhanced with 1898-1968 archive
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NEWS 4 AUG 28
                 ADISCTI Reloaded and Enhanced
                 CA(SM)/CAplus(SM) Austrian patent law changes
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                 CA/CAplus fields enhanced with simultaneous left and right
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NEWS
                 truncation
                 CA(SM)/CAplus(SM) display of CA Lexicon enhanced
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                 CAS REGISTRY (SM) updated with amino acid codes for pyrrolysine
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                 CEABA-VTB classification code fields reloaded with new
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                 classification scheme
NEWS 12
         OCT 19
                 LOGOFF HOLD duration extended to 120 minutes
NEWS 13
         OCT 19
                 E-mail format enhanced
                 Option to turn off MARPAT highlighting enhancements available
NEWS 14
         OCT 23
                 CAS Registry Number crossover limit increased to 300,000 in
NEWS 15
         OCT 23
                 multiple databases
                 The Derwent World Patents Index suite of databases on STN
NEWS 16
         OCT 23
                 has been enhanced and reloaded
NEWS 17
         OCT 30
                 CHEMLIST enhanced with new search and display field
         NOV 03
                 JAPIO enhanced with IPC 8 features and functionality
NEWS 18
NEWS 19
         NOV 10
                 CA/CAplus F-Term thesaurus enhanced
                 STN Express with Discover! free maintenance release Version
NEWS 20
         NOV 10
                 8.01c now available
                 CA/CAplus pre-1967 chemical substance index entries enhanced
NEWS 21
         NOV 13
                 with preparation role
                 CAS Registry Number crossover limit increased to 300,000 in
NEWS 22
         NOV 20
                 additional databases
         NOV 20
                 CA/CAplus to MARPAT accession number crossover limit increased
NEWS 23
                 to 50,000
                 CA/CAplus patent kind codes will be updated
         NOV 20
NEWS 24
         DEC 01
                 CAS REGISTRY updated with new ambiguity codes
NEWS 25
              NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT
NEWS EXPRESS
              MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
              AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.
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              STN Operating Hours Plus Help Desk Availability
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              For general information regarding STN implementation of IPC 8
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              X.25 communication option no longer available
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=> FILE REGISTRY

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SINCE FILE TOTAL ENTRY SESSION 0.21

0.21

FULL ESTIMATED COST

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chain nodes :
7  8  10  11  12  13  14  15
ring nodes :
1  2  3  4  5
chain bonds :
2-12  2-14  3-11  3-15  4-7  4-8  5-10  5-13
ring bonds :
1-2  1-5  2-3  3-4  4-5
exact/norm bonds :
1-2  1-5  2-3  2-12  3-4  3-11  3-15  4-5  4-7  4-8  5-10
exact bonds :
2-14  5-13
```

G1:C,H,O

G2:C,O

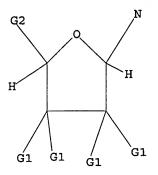
Match level:
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 7:CLASS 8:CLASS 10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS

L1

=> d l1

L1 HAS NO ANSWERS

L1



G1,C,H,O

G2 C, O

Structure attributes must be viewed using STN Express query preparation.

=> s 11

SAMPLE SEARCH INITIATED 17:50:06 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED -13671 TO ITERATE

14.6% PROCESSED

2000 ITERATIONS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:

ONLINE **COMPLETE**

COMPLETE BATCH

PROJECTED ITERATIONS:

266416 TO 280424

PROJECTED ANSWERS:

1327 TO 2499

14 SEA SSS SAM L1

=> s l1 sss full

FULL SEARCH INITIATED 17:50:10 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 275980 TO ITERATE

100.0% PROCESSED 275980 ITERATIONS 2521 ANSWERS

167.15

14 ANSWERS

SEARCH TIME: 00.00.02

L3

2521 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS

TOTAL SINCE FILE

> SESSION ENTRY

FULL ESTIMATED COST 166.94

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http://www.cas.org/infopolicy.html

=> s 13/thu

1335 L3 835303 THU/RL

L4

51 L3/THU

(L3 (L) THU/RL)

=> d l4 1-51 ti

- L4 ANSWER 1 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Antitumor sustained-release injection containing platinum compounds and/or their synergistic agents from taxane, alkylating agent and/or plant alkaloid
- L4 ANSWER 2 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Antitumor sustained-release injection containing platinum compounds and their synergistic agents from anti-mitotic drugs or alkylating agents
- L4 ANSWER 3 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Antitumor sustained-release injection containing estrogen receptor antagonist and its synergistic agent from taxanes, alkylating agents and/or plant alkaloids
- L4 ANSWER 4 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Antitumor sustained-release injection containing anti-metabolic antitumor drug and/or its synergistic agent from alkylating agent and/or guanine analogs
- L4 ANSWER 5 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Antitumor sustained-release injection containing vascular inhibitor and/or its synergistic agent from taxanes, alkylating agents and/or plant alkaloids
- L4 ANSWER 6 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Antitumor sustained-release injection containing vascular inhibitor
- L4 ANSWER 7 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Antitumor sustained-release injection containing platinum drug and/or its synergistic agent
- L4 ANSWER 8 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Antitumor sustained-release injection containing methotrexate synergistic agent
- L4 ANSWER 9 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Antitumor sustained-release injection containing 5-fluorouracil
- L4 ANSWER 10 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Manufacture of antitumor sustained-release injection containing taxane
- L4 ANSWER 11 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN

- TI Preparation of nucleoside analogs for treating or preventing diseases associated with nonsense mutations of mRNA
- L4 ANSWER 12 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Pharmaceutical composition containing angiogenesis inhibitor for treating solid tumor
- L4 ANSWER 13 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Manufacture of drug composition containing angiogenesis inhibitor for treating tumor
- L4 ANSWER 14 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Composition comprising nitric oxide synthase inhibitor and/or glutathione synthetase inhibitor for treatment of tumor
- L4 ANSWER 15 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Anticancer implant composition comprising nitrosourea
- L4 ANSWER 16 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Anticancer implant composition for tumor local treatment
- L4 ANSWER 17 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Sustained-release antitumor implant
- L4 ANSWER 18 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- TI In vivo antitumor activity of clitocine, an exocyclic amino nucleoside isolated from Lepista inversa
- L4 ANSWER 19 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Combined anticancer medicines containing pyrimidine analogs and nitrosourea drugs
- L4 ANSWER 20 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Combined antitumor medicines containing guanine analogs and nitrosourea drugs for the treatment of solid tumors
- L4 ANSWER 21 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Manufacture of anticancer medicinal composition containing topoisomerase inhibitors
- L4 ANSWER 22 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Manufacture of anticancer medicinal composition containing tetrazines
- L4 ANSWER 23 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- TI VISCANA: Visualized Cluster Analysis of Protein-Ligand Interaction Based on the ab Initio Fragment Molecular Orbital Method for Virtual Ligand Screening
- L4 ANSWER 24 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Tiotropium-containing inhalant powder packaged in an inhaler with moisture-tight sealing
- L4 ANSWER 25 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Pre-metered dry powder inhaler for moisture-sensitive medicaments, such as tiotropium
- L4 ANSWER 26 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Medical product containing tiotropium
- L4 ANSWER 27 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Inhalable tiotropium and container therefor
- L4 ANSWER 28 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Compositions and methods for the treatment of severe acute respiratory syndrome (SARS)

- L4 ANSWER 29 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- TI QSAR for anti-RNA-virus activity, synthesis, and assay of anti-RSV carbonucleosides given a unified representation of spectral moments, quadratic, and topologic indices
- L4 ANSWER 30 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Incorporating Protein Flexibility in Structure-Based Drug Discovery: Using HIV-1 Protease as a Test Case
- L4 ANSWER 31 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Compounds, compositions and methods for modulating fat metabolism for treatment of metabolic disorders
- L4 ANSWER 32 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Use of nucleoside compounds for nonsense suppression and the treatment of genetic diseases
- L4 ANSWER 33 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Preparation of nucleoside analogs and their use for treating cancer and diseases associated with somatic mutations of mRNA
- L4 ANSWER 34 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Evaluation of designed ligands by a multiple screening method: application to glycogen phosphorylase inhibitors constructed with a variety of approaches
- L4 ANSWER 35 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Preparation of bicyclic peptide tachykinin NK2 antagonists.
- L4 ANSWER 36 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Cytotoxicity and metabolism of 4-methoxy-8-(β-D-ribofuranosylamino)pyrimido[5,4-d]pyrimidine in HCT 116 colon cancer cells
- L4 ANSWER 37 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Method of determination of the structure of adenosine analogs and related compounds and compounds determined or formed by the method
- L4 ANSWER 38 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Inhibition of 5-phosphoribosyl-1-pyrophosphate synthetase by the monophosphate metabolite of 4-amino-8-(β -D-ribofuranosylamino)pyrimido[5,4-d]pyrimidine: A novel mechanism for antitumor activity
- L4 ANSWER 39 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- TI The problem of the quiescent cancer cell
- L4 ANSWER 40 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- Structural mimicry of adenosine by the antitumor agents 4-methoxy- and 4-amino-8-(β -D-ribofuranosylamino)pyrimido[5,4-d]pyrimidine as viewed by a molecular modeling method
- L4 ANSWER 41 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Inhibition of phosphoribosylpyrophosphate synthetase by 4-methoxy- (MRPP) and 4-amino-8-(D-ribofuranosylamino)pyrimido[5,4-d]pyrimidine (ARPP)
- L4 ANSWER 42 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Biochemical pharmacology and antitumor properties of 4-amino-8- $[\beta$ -D-ribofuranosylamino]pyrimido[5,4-d]pyrimidine
- L4 ANSWER 43 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Isothiazolopyrimidines new group of anticancer agents. II
- L4 ANSWER 44 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Synthesis and antiviral activity of certain 9-β-D-ribofuranosylpurine-

6-carboxamides

- L4 ANSWER 45 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Cancer-preventing and -treating medicine
- L4 ANSWER 46 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Comparative pharmacology of three new nitrosourea analogs: RFCNU, RPCNU, and chlorozotocin. I. Oncostatic effects in mice
- L4 ANSWER 47 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- TI New analogs of streptozotocin
- L4 ANSWER 48 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Animal corneas as tools for the testing of antiviral compounds
- L4 ANSWER 49 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- TI The search for non-immunosuppressive oncostatic agents
- L4 ANSWER 50 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Analogs of 8-azainosine
- L4 ANSWER 51 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN
- TI In vitro evaluation of the cytotoxic activity of nitrosoureas
- => s 14 not py>2005 1209008 PY>2005
- L5 35 L4 NOT PY>2005
- => d l5 1-35 ti
- L5 ANSWER 1 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Pharmaceutical composition containing angiogenesis inhibitor for treating solid tumor
- L5 ANSWER 2 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Manufacture of drug composition containing angiogenesis inhibitor for treating tumor
- L5 ANSWER 3 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Composition comprising nitric oxide synthase inhibitor and/or glutathione synthetase inhibitor for treatment of tumor
- L5 ANSWER 4 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Anticancer implant composition comprising nitrosourea
- L5 ANSWER 5 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Anticancer implant composition for tumor local treatment
- L5 ANSWER 6 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Sustained-release antitumor implant
- L5 ANSWER 7 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Combined anticancer medicines containing pyrimidine analogs and nitrosourea drugs
- L5 ANSWER 8 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Combined antitumor medicines containing guanine analogs and nitrosourea drugs for the treatment of solid tumors
- L5 ANSWER 9 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Manufacture of anticancer medicinal composition containing topoisomerase inhibitors
- L5 ANSWER 10 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN

- TI Manufacture of anticancer medicinal composition containing tetrazines
- L5 ANSWER 11 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Tiotropium-containing inhalant powder packaged in an inhaler with moisture-tight sealing
- L5 ANSWER 12 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Compositions and methods for the treatment of severe acute respiratory syndrome (SARS)
- L5 ANSWER 13 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
- TI QSAR for anti-RNA-virus activity, synthesis, and assay of anti-RSV carbonucleosides given a unified representation of spectral moments, quadratic, and topologic indices
- L5 ANSWER 14 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
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- L5 ANSWER 16 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Use of nucleoside compounds for nonsense suppression and the treatment of genetic diseases
- L5 ANSWER 17 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Preparation of nucleoside analogs and their use for treating cancer and diseases associated with somatic mutations of mRNA
- L5 ANSWER 18 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Evaluation of designed ligands by a multiple screening method: application to glycogen phosphorylase inhibitors constructed with a variety of approaches
- L5 ANSWER 19 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Preparation of bicyclic peptide tachykinin NK2 antagonists.
- L5 ANSWER 20 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Cytotoxicity and metabolism of 4-methoxy-8-(β-D-ribofuranosylamino)pyrimido[5,4-d]pyrimidine in HCT 116 colon cancer cells
- L5 ANSWER 21 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Method of determination of the structure of adenosine analogs and related compounds and compounds determined or formed by the method
- L5 ANSWER 22 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Inhibition of 5-phosphoribosyl-1-pyrophosphate synthetase by the monophosphate metabolite of 4-amino-8-(β -D-ribofuranosylamino)pyrimido[5,4-d]pyrimidine: A novel mechanism for antitumor activity
- L5 ANSWER 23 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
- TI The problem of the quiescent cancer cell
- L5 ANSWER 24 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Structural mimicry of adenosine by the antitumor agents 4-methoxy- and 4-amino-8-(β -D-ribofuranosylamino)pyrimido[5,4-d]pyrimidine as viewed by a molecular modeling method
- L5 ANSWER 25 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Inhibition of phosphoribosylpyrophosphate synthetase by 4-methoxy- (MRPP) and 4-amino-8-(D-ribofuranosylamino)pyrimido[5,4-d]pyrimidine (ARPP)

- L5 ANSWER 26 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Biochemical pharmacology and antitumor properties of 4-amino-8-[β -D-ribofuranosylamino]pyrimido[5,4-d]pyrimidine
- L5 ANSWER 27 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Isothiazolopyrimidines new group of anticancer agents. II
- L5 ANSWER 28 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Synthesis and antiviral activity of certain 9- β -D-ribofuranosylpurine-6-carboxamides
- L5 ANSWER 29 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Cancer-preventing and -treating medicine
- L5 ANSWER 30 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Comparative pharmacology of three new nitrosourea analogs: RFCNU, RPCNU, and chlorozotocin. I. Oncostatic effects in mice
- L5 ANSWER 31 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
- TI New analogs of streptozotocin
- L5 ANSWER 32 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Animal corneas as tools for the testing of antiviral compounds
- L5 ANSWER 33 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
- TI The search for non-immunosuppressive oncostatic agents
- L5 ANSWER 34 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Analogs of 8-azainosine
- L5 ANSWER 35 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
- TI In vitro evaluation of the cytotoxic activity of nitrosoureas
- => d 15 1 2 3 7 9 12 15 16 17 20 22 24 25 26 28 29 31 34 35 ti abs bib
- L5 ANSWER 1 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Pharmaceutical composition containing angiogenesis inhibitor for treating solid tumor
- AB The title composition contains angiogenesis inhibitor or mixture of angiogenesis

inhibitor and anticancer agent (nitrosourea compound) as active component. The angiogenesis inhibitor can be selected from one or more of carboxyamidotriazole, thalidomide, linomide, angiostatin, endostatin, etc. The topical sustained-release of effective components can reduce systemic toxic reaction, selectively increase the drug level at the tumor site, and improve the therapeutic effect of non-operative therapy such as chemotherapy and radiotherapy.

- AN 2006:586488 CAPLUS
- DN 145:89926
- TI Pharmaceutical composition containing angiogenesis inhibitor for treating solid tumor
- IN Kong, Qingzhong; Sun, Juan
- PA Shandong Lanjin Biotech Co., Ltd., Peop. Rep. China
- SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 14 pp. CODEN: CNXXEV
- DT Patent
- LA Chinese
- FAN. CNT 1

1124.	-11 T T					
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
ΡI	CN 1686556	Α	20051026	CN 2005-10042265	20050406	
PRAT	CN 2005-10042265		20050406			

- TI Manufacture of drug composition containing angiogenesis inhibitor for treating tumor
- The title composition contains tyrosine kinase inhibitor or a combination of tyrosine kinase inhibitor and nitrosourea antitumor agent as active component and auxiliary materials. The composition can effectively destroy tumor blood vessel, inhibit neovascularization, and promote penetration and diffusion of antitumor agents into the tumor tissues, therefore decreasing the tolerance of tumor tissues to nitrosourea antitumor agents. The auxiliary materials are composed of degradable and biocompatible polymers, which can achieve the sustained-release of antitumor agents specifically to tumor tissues, therefore decreasing the drug toxicity of whole body while maintaining necessary drug concentration on tumor tissues.
- AN 2006:586483 CAPLUS
- DN 145:130748
- TI Manufacture of drug composition containing angiogenesis inhibitor for treating tumor
- IN Kong, Qingzhong; Sun, Juan
- PA Shandong Lanjin Biotech Co., Ltd., Peop. Rep. China
- SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 20 pp. CODEN: CNXXEV
- DT Patent
- LA Chinese
- FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
ΡI	CN 1686546	A	20051026	CN 2005-10042264	20050406		
PRAT	CN 2005-10042264		20050406				

- L5 ANSWER 3 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Composition comprising nitric oxide synthase inhibitor and/or glutathione synthetase inhibitor for treatment of tumor
- The title composition comprises nitric oxide synthase inhibitor and/or glutathione synthetase inhibitor, and optionally nitrosourea anticancer drugs (alestramustine, streptozotocin, atrimustine, etc.) or analogs thereof, and biocompatible and biodegradable polymer (polylactic acid, copolymer of lactic acid and glycolic acid, etc.) as pharmaceutical adjuvant. The inhibitors can inhibit DNA repair in cells to reduce tolerance of tumor cell to nitrosourea anticancer drugs or analogs thereof. The composition can be placed at the tumor site to reduce systemic toxic reaction, and to selectively increase the drug level at the tumor site so as to improve the therapeutic effect of non-operative therapy such as chemotherapy and radiotherapy.
- AN 2006:547679 CAPLUS
- DN 145:51001
- TI Composition comprising nitric oxide synthase inhibitor and/or glutathione synthetase inhibitor for treatment of tumor
- IN Kong, Qingzhong; Sun, Juan; Liu, Enxiang; Zhang, Jie
- PA Shandong Lanjin Biotech Co., Ltd., Peop. Rep. China
- SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 16 pp. CODEN: CNXXEV
- DT Patent
- LA Chinese
- FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI CN 1679952	Α	20051012	CN 2005-10042437	20050203
PRAI CN 2005-10042437		20050203		

- L5 ANSWER 7 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Combined anticancer medicines containing pyrimidine analogs and nitrosourea drugs
- AB The title medicines contain 0.01-70% pyrimidine analogs or its derivs., 0-50% nitrosourea compds., and pharmaceutical auxiliary materials. The medicines can inhibit DNA repair in tumor cells, and reduce the drug resistance of tumor cells to nitrosourea anticancer drugs. The

pharmaceutical auxiliary materials are biocompatible and biodegradable polymer, which can slowly release the anticancer active ingredients at the tumor site during the biodegrdn. and absorption process so as to reduce the systemic toxic reaction while maintaining effective levels of the drugs at the tumor site. The medicines can be placed at the tumor site to improve the therapeutic effect of non-operative therapy such as chemotherapy and radiotherapy.

AN 2006:39408 CAPLUS

DN 144:239895

TI Combined anticancer medicines containing pyrimidine analogs and nitrosourea drugs

IN Kong, Qingzhong

PA Peop. Rep. China

SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 21 pp.

CODEN: CNXXEV

DT Patent

LA Chinese

FAN.CNT 1

	2112 2						
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
ΡI	CN 1628853	Α	20050622	CN 2004-10035929	20041014		
DRAT	CN 2004-10035929		20041014				

L5 ANSWER 9 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN

TI Manufacture of anticancer medicinal composition containing topoisomerase inhibitors

AB The title composition contains nitrosourea anticancer drugs (0.00-40 weight%) and

topoisomerase inhibitors (0.01-50 weight%) enveloped in the medicinal adjuvant. Topoisomerase inhibitors can inhibit DNA repair in cells, and reduce the tolerance of tumor cells to nitrosourea anticancer drugs. The medicinal adjuvant is biocompatible and degradable polymer, which can slowly release the anticancer active components at the tumor site during the degradation and absorption process so as to reduce the systemic toxic reaction while maintaining effective levels of the drugs at the tumor site. The composition can be placed at the tumor site to reduce systemic toxic reaction of nitrosourea anticancer drugs and topoisomerase inhibitor, and also selectively increase the drug level at the tumor site so as to improve the therapeutic effect of non-operative therapy such as chemotherapy and radiotherapy.

AN 2005:1257943 CAPLUS

DN 144:135174

TI Manufacture of anticancer medicinal composition containing topoisomerase inhibitors

IN Kong, Qingzhong

PA Peop. Rep. China

SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 23 pp. CODEN: CNXXEV

DT Patent

LA Chinese

FAN.CNT 1

I Au	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
ΡI	CN 1616099	A	20050518	CN 2004-10035927	20041014	
PRAI	CN 2004-10035927		20041014			

L5 ANSWER 12 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN

TI Compositions and methods for the treatment of severe acute respiratory syndrome (SARS)

AB The invention provides compns. and methods for treating a coronavirus infection, especially a SARS CoV infection. The compns. comprise an antiviral nucleoside or mimetic thereof, or an antiviral antisense agent, in a form suitable for pulmonary or nasal delivery. The methods comprise administration to a patient in need thereof the effective amount of an antiviral composition by pulmonary or nasal instillation.

```
2005:216597 CAPLUS
AN
DN
     142:291323
    Compositions and methods for the treatment of severe acute respiratory
TI
     syndrome (SARS)
    Hardee, Greg; Dellamary, Luis
IN
     Isis Pharmaceuticals, Inc., USA
PΑ
SO
     PCT Int. Appl., 217 pp.
     CODEN: PIXXD2
DT
     Patent
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                                          APPLICATION NO.
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                                           WO 2004-US16196
PΙ
    WO 2005020885
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     WO 2005020885
                         A3
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            CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
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            LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
            NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
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            AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
            EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
            SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
             SN, TD, TG
PRAI US 2003-472774P
                               20030521
    ANSWER 15 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
L5
TI
     Compounds, compositions and methods for modulating fat metabolism for
     treatment of metabolic disorders
    Methods and compns. of identifying candidate compds., for modulating fat
AB
    metabolism and/or inhibiting Apobec-1 activity are provided. The invention
     relates to compds. and pharmaceutical compns. which are useful for
     regulating fat metabolism and can be used for treatment of diseases and
     disorders selected from the group consisting of overweight, obesity,
     atherosclerosis, hypertension, non-insulin dependent diabetes mellitus,
    pancreatitis, hypercholesteremia, hypertriglyceridemia, hyperlipidemia.
AN
    2004:368857 CAPLUS
DN
     140:386000
    Compounds, compositions and methods for modulating fat metabolism for
TI
     treatment of metabolic disorders
IN
    Gaudriault, Georges; Kilinc, Ahmet; Bousquet, Olivier; Goupil-Lamy, Anne;
    Harosh, Itzik
PA
    Obetherapy Biotechnology, Fr.
     PCT Int. Appl., 461 pp.
SO
     CODEN: PIXXD2
DT
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    English
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PΙ
    WO 2004037159
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                               20040506
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    WO 2004037159
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            OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
            TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
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            FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
            BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
    AU 2003274652
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                               20040513 AU 2003-274652
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PRAI US 2002-420316P P 20021023
WO 2003-IL860 W 20031023
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OS MARPAT 140:386000

- L5 ANSWER 16 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Use of nucleoside compounds for nonsense suppression and the treatment of genetic diseases
- AB The invention encompasses nucleoside compds., compns. comprising the compds. and methods for treating or preventing diseases associated with nonsense mutations of mRNA by administering these compds. or compns. Diseases that can be treated or prevented by compds. of the invention include, but are not limited to, cancer, autoimmune diseases, blood diseases, collagen diseases, diabetes, neurodegenerative diseases, cardiovascular diseases, pulmonary diseases, inflammatory diseases, lysosomal storage disease, tuberous sclerosis or central nervous system diseases. The present invention is based in part on the discovery of small mols. that modulate premature translation termination and/or nonsense-mediated mRNA decay.
- AN 2004:80704 CAPLUS
- DN 140:122839
- TI Use of nucleoside compounds for nonsense suppression and the treatment of genetic diseases
- IN Wilde, Richard G.; Almstead, Neil G.; Welch, Ellen M.; Beckmann, Holger
- PA PTC Therapeutics, Inc., USA; Tularik Inc.
- SO PCT Int. Appl., 93 pp. CODEN: PIXXD2
- DT Patent
- LA English
- FAN.CNT 2

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PATENT NO.
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PΙ
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     WO 2004009610
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             TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
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                               20040129
                                          CA 2003-2493816
     CA 2493816
                         AA
                                           AU 2003-261237
     AU 2003261237
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                                                                  20030723
                         A1
     EP 1572709
                                20050914
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                                                                  20030723
                         A2
                                20051123
     EP 1572709
                         A3
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
PRAI US 2002-398334P
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os
     MARPAT 140:122839
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- L5 ANSWER 17 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Preparation of nucleoside analogs and their use for treating cancer and diseases associated with somatic mutations of mRNA

Nucleoside analogs I, where Z is alkyl, aryl, heteroaryl, cycloalkyl, heterocyclo, arylalkyl, heteroarylalkyl, cycloalkylalkyl, heterocycloalkyl, arylcarbonyl; X is CH, O, S or NH; R1 is hydrogen, alkyl, aryl, heteroaryl, cycloalkyl, heterocyclo, arylalkyl, heteroarylalkyl, cycloalkylalkyl, heterocycloalkyl; R2 is alkyl, carboxy, amido, acyl, alkylcarbonyl, halogen, bio-hydrolyzable group, OP(0)32-, O[P(O)3]23-, O[P(O)3]34-, N3, substitute aminomethyl, alkoxymethyl; R3, R3', R4 and R4' are independently alkoxy, hydrogen, halogen, alkyl, aryl, heteroaryl, cycloalkyl, heterocyclo, arylalkyl, heteroarylalkyl, cycloalkylalkyl, heterocycloalkyl, arylcarbonyl, alkylcarbonyl, a bio-hydrolyzable group, or R3 and R4 taken together form a bond, or together with the atoms to which they are attached form a heterocyclo, or R3 and R3' and/or R4 and R4' taken together with the carbon to which they are attached form C(0); were prepared for treating or preventing diseases associated with nonsense mutations of mRNA. Thus, nucleoside analog was prepared and tested in mice as antitumor agent. The present invention encompasses the in vitro or in vivo use of a compound of the invention, and the incorporation of a compound of the invention into pharmaceutical compns. and single unit dosage forms useful in the treatment and prevention of a variety of diseases and disorders. Specific diseases and disorders include those ameliorated by the suppression of a nonsense mutation in mRNA.

AN 2004:80703 CAPLUS

DN 140:128608

TI Preparation of nucleoside analogs and their use for treating cancer and diseases associated with somatic mutations of mRNA

IN Wilde, Richard G.; Kennedy, Paul D.; Almstead, Neil G.; Welch, Ellen M.;
Takasugi, James J.; Friesen, Westley J.

PA PTC Therapeutics, Inc., USA

SO PCT Int. Appl., 109 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

		PAT	ENT I	NO.			KIN)	DATE		7	APPL	ICAT:	ION 1	NO.		D	ATE	
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]	ΡI	WO	2004	00960	9		A2		2004	0129	1	WO 2	003-1	US23	184		20	0030	723
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                        A2
                               20050601
                                          EP 2003-766014
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    EP 1534726
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            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
PRAI US 2002-398334P
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    US 2003-625059
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    WO 2003-US23184
                               20030723
    MARPAT 140:128608
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- L5 ANSWER 20 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Cytotoxicity and metabolism of 4-methoxy-8-(β-D-

ribofuranosylamino)pyrimido[5,4-d]pyrimidine in HCT 116 colon cancer cells We examined the cytotoxicity, biochem. effects and metabolism of AB 4-methoxy-8-(β-D-ribofuranosylamino)pyrimido[5,4-d]pyrimidine (MRPP), a synthetic nucleoside inhibitor of phosphoribosylpyrophosphate synthetase, in HCT 116 human colorectal cancer cells. A 4-h exposure to 1 and 10 µM MRPP inhibited cell growth over a 72-h period by 76 and 89%, and inhibited clonogenic capacity by 36 and 65%, resp., MRPP was avidly metabolized to the 5'-monophosphate derivative (MRPP-MP), and MRPP-MP formation increased with increasing MRPP exposure (µM.hr). MRPP-MP was stable, and the intracellular half-life was in excess of 48 h. A 4-h exposure to 10 µM MRPP resulted in significant decreases in ATP, UTP, GTP, CTP, dATP, dTTP, and PRPP pools. Near maximal ribonucleotide triphosphate depletion was achieved with ≥24 µM.hr MRPP, and growth inhibition as a function of MRPP µM.hr closely reflected the biochem. effects. Ribonucleotide triphosphate pools remained depleted for up to 48 h after drug removal, apparently as a consequence of the prolonged retention of MRPP-MP, MRPP (10 µM) inhibited the salvage of [3H] quanine, [3H] -adenine and [3H] quanosine, and concurrent exposure to . MRPP and either 100 μM adenine, hypoxanthine, or guanine did not reverse ATP or GTP depletion. Concurrent exposure to 10 µM MRPP and either 10 µM adenosine, uridine or thymidine was accompanied by repletion of ATP, UTP, and dTTP pools, resp., but depletion of other nucleotide pools was not corrected In contrast, 10 µM guanosine did not correct GTP depletion in the presence of MRPP. The combination of 10 μM each of thymidine, uridine, adenosine and guanosine during and following a 24-h exposure to MRPP provided partial protection against 0.1 or 1 μ M MRPP, but did not affect the cytotoxicity associated with 10 μ M MRPP. MRPP is a novel antimetabolite that inhibits both de novo and salvage pathways for purine synthesis and de novo pyrimidine synthesis.

- AN 1995:266715 CAPLUS
- DN 122:95951
- TI Cytotoxicity and metabolism of 4-methoxy-8-(β-D-ribofuranosylamino)pyrimido[5,4-d]pyrimidine in HCT 116 colon cancer cells
- AU Grem, Jean L.; Daychild, Pamela; Drake, James; Geoffroy, Francois; Trepel, Jane B.; Pirnia, Farzaneh; Allegra, Carmen J.
- CS NCI-Navy Med. Oncology Branch Clinical Pharmacology Branch, Clinical Oncology Program, Bethesda, MD, USA
- SO Biochemical Pharmacology (1994), 48(11), 2117-26 CODEN: BCPCA6; ISSN: 0006-2952
- PB Elsevier
- DT Journal
- LA English
- L5 ANSWER 22 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Inhibition of 5-phosphoribosyl-1-pyrophosphate synthetase by the monophosphate metabolite of 4-amino-8-(β -D-ribofuranosylamino)pyrimido[5,4-d]pyrimidine: A novel mechanism for antitumor activity
- AB The aminopyrimidopyrimidine nucleoside 4-amino-8-(β-D-ribofuranosylamino)pyrimido[5,4-d]pyrimidine (APP), which was previously shown to possess exptl. antitumor and antiviral activity, was metabolized within W1-L2 human lymphoblastoid cells to a derivative identified as the β-D-ribonucleotide (APP-MP). In a subline of W1-L2 cells deficient

in adenosine kinase, this metabolite was not formed and APP was not cytotoxic, suggesting that APP is converted by adenosine kinase to its 5'-monophosphate. Because no evidence of di- or triphosphates was seen, the monophosphate appeared to be the active species. Treatment of W1-L2 or L1210 cells with APP (10 $\mu\text{M})$ for 30 min caused extensive depletion of both purine and pyrimidine ribonucleotides. Purine and pyrimidine deoxyribonucleotides were also depleted. Cells were not protected from the cytotoxicity of APP by hypoxanthine plus uridine, but uridine plus adenosine plus 2-deoxycoformycin gave considerable protection. This result was consistent with APP-MP acting as an inhibitor of 5-phosphoribosyl-1-pyrophosphate (PRPP) synthetase, a hypothesis that was confirmed by preparing PRPP synthetase from Novikoff hepatoma cells; APP-MP was a noncompetitive inhibitor, with a Ki of 0.43 mM. APP-MP was found to accumulate in APP-treated cells to a concentration of almost 3 mM. The

relevance

of PRPP synthetase inhibition to the cytotoxic mechanism of APP is indicated by the fact that depletion of the PRPP pool was seen as early at 15 min after treatment, before any change was apparent in cellular levels of ATP or UTP. DNA synthesis was markedly suppressed within 30 min of APP treatment of W1-L2 cells, and a lesser degree of inhibition of RNA synthesis was apparent after 45 min.

- AN 1994:23136 CAPLUS
- DN 120:23136
- TI Inhibition of 5-phosphoribosyl-1-pyrophosphate synthetase by the monophosphate metabolite of 4-amino-8-(β -D-ribofuranosylamino)pyrimido[5,4-d]pyrimidine: A novel mechanism for antitumor activity
- AU Fry, David W.; Boritzki, Theodore J.; Jackson, Robert C.; Cook, P. Dan; Leopold, Wilbur R.
- CS Parke-Davis Pharm. Res. Div., Warner-Lambert Co., Ann Arbor, MI, 48105, USA
- SO Molecular Pharmacology (1993), 44(2), 479-85 CODEN: MOPMA3; ISSN: 0026-895X
- DT Journal
- LA English
- L5 ANSWER 24 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Structural mimicry of adenosine by the antitumor agents 4-methoxy- and 4-amino-8-(β -D-ribofuranosylamino)pyrimido[5,4-d]pyrimidine as viewed by a molecular modeling method

GΙ

AB A rationale for the antitumor activity of 4-methoxy- and 4-amino-8-(β -D-ribofuranosylamino)pyrimido-[5,4-d]pyrimidine (I and II, resp.,) was studied by a mol. modeling method. Although these

nucleoside analogs are structurally different from adenosine, they act at substrates for adenosine kinase. The mol. modeling method, which considered the 3-dimensional structure and atom-based physicochem. properties of the nucleosides to quantify the mol. similarities, showed that certain low-energy conformations of the β anomers of a series of nucleosides including I, II, and their 4-hydroxy, 4-amino-6-chloro, 4-methylthio-2,6-dichloro, 4,6-diamino, 4-dimethylamino, 4-methylamino, and 4-hydroxy-2,6-dichloro analogs have remarkable structural similarity to adenosine. The method also suggested that the selection of the reference compound adenosine in the structural comparison is of primary importance to gain insight into the observed antitumor activity. The success of the present method led to AM1 (Austin model I) MO calcns. and exptl. studies indicating that the antitumor activity of the α anomer of II is probably due to equilibrium to the β anomer. The AM1 calcn. of the protonation energy of N5 of pyrimido[5,4-d]pyrimidines, which occupies the same position in space as the N1 of adenosine, gave a direct correlation between the basicity of the nitrogen with a lone pair of electrons and the observed antitumor activity.

- AN 1990:69408 CAPLUS
- DN 112:69408
- TI Structural mimicry of adenosine by the antitumor agents 4-methoxy- and 4-amino-8-(β -D-ribofuranosylamino)pyrimido[5,4-d]pyrimidine as viewed by a molecular modeling method
- AU Ghose, Arup K.; Viswanadhan, Vellarkad N.; Šanghvi, Yogesh S.; Dee Nord, L.; Willis, Randall C.; Revankar; Ganapathi R.; Robins, Roland K.
- CS ICN Nucleic Acid Res. Inst., Costa Mesa, CA, 92626, USA
- SO Proceedings of the National Academy of Sciences of the United States of America (1989), 86(21), 8242-6
 CODEN: PNASA6; ISSN: 0027-8424
- DT Journal
- LA English
- L5 ANSWER 25 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Inhibition of phosphoribosylpyrophosphate synthetase by 4-methoxy- (MRPP) and 4-amino-8-(D-ribofuranosylamino)pyrimido[5,4-d]pyrimidine (ARPP)
- AB The basis for the antitumor activities of the title exocyclic amino nucleosides was investigated. The primary target of these nucleosides appeared to be 5-phospho- α -D-ribofuranose-1-pyrophosphate (PRPP) synthetase. MRPP 5'-monophosphate was a competitive inhibitor of the activation of this enzyme by the cofactor inorg. phosphate. Consequently, ARPP and MRPP treatment of WI-L2 cultures rapidly inhibited both de novo pyrimidine and purine synthesis as well as the nucleotide salvage reactions dependent on PRPP. ARPP or MRPP treatment completely prevented H14CO3- incorporation into acid-soluble pyrimidine and purine nucleotides. The rate of salvage of [8-14C] hypoxanthine to form IMP was decreased 85%. Treatment of cells with these agents caused a 50% reduction in the steady-state level of PRPP. When the capacity of the treated cells for sustained synthesis of PRPP was examined by adenine incorporation, the rate of adenine uptake was inhibited by >50%. In vitro treatment of BDF1 mice with a single dose of ARPP (173 mg/kg) or MRPP (62 mg/kg) extended the mean life span of the mice, which had been inoculated i.p. 1 day earlier with 1 + 106 L1210 murine leukemia cells, by 62 and 82%, resp. These studies indicate that MRPP and ARPP inhibit PRPP synthetase, and that PRPP synthetase may be a viable target in the development of certain antitumor agents.
- AN 1990:48363 CAPLUS
- DN 112:48363
- TI Inhibition of phosphoribosylpyrophosphate synthetase by 4-methoxy- (MRPP) and 4-amino-8-(D-ribofuranosylamino)pyrimido[5,4-d]pyrimidine (ARPP)
- AU Nord, L. Dee; Willis, Randall C.; Breen, Timothy S.; Avery, Thomas L.; Finch, Rick A.; Sanghvi, Yogesh S.; Revankar, Ganapathi R.; Robins, Roland K.
- CS Dep. Biochem., ICN Nucleic Acid Res. Inst., Costa Mesa, CA, 92626, USA
- SO Biochemical Pharmacology (1989), 38(20), 3543-9 CODEN: BCPCA6; ISSN: 0006-2952

DT Journal

- LA. English
- L5 ANSWER 26 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Biochemical pharmacology and antitumor properties of 4-amino-8-[β -D-ribofuranosylamino] pyrimido [5, 4-d] pyrimidine
- Exptl. chemotherapy, cell culture, and mechanism-of-action studies of the AB title compound (NSC 283867; I) are presented. DBA/2 and CD2F1 mice bearing L 1210 leukemia cells, as well as C3H and B6C3F1 mice bearing mammary carcinoma 16/c were used. In vitro effects of I and the 5'-phosphate of I (II) were studied in L1210, WI-L2, HCT-8, B16, HL-60, CHO-K1, P388, colon carcinoma 26, CCRF-CEM, and MCF-7 cell lines. The antileukemia IC50 values were 0.402 and 0.255 (for I and II, resp.), and the anticarcinoma values were 0.949 and 0.548. I is activated by adenosine kinase to II; then II inhibits ribose-5-phosphate pyrophosphokinase (EC 2.7.6.1; PRPP synthetase), and depletes cellular PRPP and purine and pyrimidine nucleotides. I inhibits synthesis of DNA and RNA, and blocks cells in the G1 phase of the cell cycle. I retains full activity against multiply drug resistant cells and is equally active against quiescent and proliferating CHO cells. I has only weak activity against L1210 leukemia in vivo, but has substantial activity against mammary carcinoma 16/c. In vitro, I has a relatively high ratio (2.4) of solid tumor:leukemia activity.

AN 1989:608779 CAPLUS

- DN 111:208779
- TI Biochemical pharmacology and antitumor properties of 4-amino-8- $[\beta$ -D-ribofuranosylamino]pyrimido[5,4-d]pyrimidine
- AU Jackson, Robert C.; Boritzki, Theodore J.; Cook, P. Dan; Hook, Kenneth E.; Leopold, Wilbur R.; Fry, David W.
- CS Parke-Davis Pharm. Res. Div., Warner-Lambert Co., Ann Arbor, MI, 48105, USA
- SO Advances in Enzyme Regulation (1989), 28, 185-99 CODEN: AEZRA2; ISSN: 0065-2571
- DT Journal
- LA English
- L5 ANSWER 28 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Synthesis and antiviral activity of certain 9- β -D-ribofuranosylpurine-6-carboxamides

GI

Ribofuranosylpurines were synthesized and tested for antiviral efficacy against several RNA and DNA viruses in cell culture and against Rift Valley fever virus in mice. 9β -D-Ribofuranosylpurine-6-carboxamide (I) [65134-53-4], its 6-thiocarboxamide (II) [78131-47-2], and 4-amino-8- $(\beta$ -D-ribofuranosylamino)pyrido[5,4-d]pyrimidine (III)

[50663-92-8] had significant in vitro antiviral activity at nontoxic doses. I (50 mg/kg/day) also had antiviral activity in mice infected with Rift Valley fever virus (55% survival rate on day 21 compared to 30% in controls).

AN 1981:473399 CAPLUS

DN 95:73399

TI Synthesis and antiviral activity of certain 9- β -D-ribofuranosylpurine-6-carboxamides

AU Westover, James D.; Revankar, Ganapathi R.; Robins, Roland K.; Madsen, Randall D.; Ogden, John R.; North, James A.; Mancuso, Robert W.; Rousseau, Robert J.; Stephen, Edward L.

CS Cancer Res. Cent., Brigham Young Univ., Provo, UT, 84602, USA

SO Journal of Medicinal Chemistry (1981), 24(8), 941-6 CODEN: JMCMAR; ISSN: 0022-2623

DT Journal

LA English

L5 ANSWER 29 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN

TI Cancer-preventing and -treating medicine

AB 2,3,4,5,6-Penta-O-acetylgluconyl isothiocyanate (I) [58314-42-4], alone or with related compds., inhibited 2-fluorenylacetamide-induced tumors in mice, diethylnitrosamine-induced cancer in aquarium fish, and 3'-methyl-4-dimethylaminoazobenzene-induced cancers in rats.

AN 1981:435764 CAPLUS

DN 95:35764

TI Cancer-preventing and -treating medicine

IN Enomoto, Makoto; Doke, Nobumichi

PA Nitto Chemical Industry Co., Ltd., Japan; Chemisciences Inc.

SO Eur. Pat. Appl., 21 pp. CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	EP 24202	A1	19810225	EP 1980-302800	19800813
	EP 24202	B1	19830720	•	
	R: CH, DE, FR,	GB, IT			
	JP 56039018	A2	19810414	JP 1979-104091	19790817
	JP 63028886	B4	19880610		
	CA 1152432	A1	19830823	CA 1980-357953	19800811
	US 4357349	Α	19821102 ·	US 1980-178422	19800815
PRAI	JP 1979-104091	Α	19790817		
os	CASREACT 95:35764				

L5 ANSWER 31 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN

TI New analogs of streptozotocin

GI

$$O_2N$$
 O_2CH_2 O_3CH_2 O_4CO O_4CO O_5CH_2 O_5CH_2 O_7 O

AB 1'-(3-Methyl-3-nitrosoureido)-2',3',4'-tri-0-acetyl- β -D-ribopyranose (I) [69610-48-6] and 1'-(3-methyl-3-nitrosoureido)-2',3'-0-isopropylidene-

 $5'\cdot (\text{O-p-nitrobenzoyl}) - \alpha$ and $\beta\text{-D-ribofuranose}$ (II) [69584-54-9] had greater antitumor activity than streptozotocin against L 1210 leukemia in mice and were less toxic than streptozotocin. The optimal i.p. doses of I and II were 240 and 600 mg/kg, resp. The syntheses of I and II and of several of their precursors are reported.

AN 1979:145679 CAPLUS

DN 90:145679

TI New analogs of streptozotocin

AU Moruzzi, Aurelio; Montero, Jean Louis; Oiry, Joel; Imbach, Jean Louis

CS Lab. Chim. Bio-Org., Univ. Sci. Tech. Languedoc, Montpellier, Fr.

SO European Journal of Medicinal Chemistry (1978), 13(5), 421-4

CODEN: EJMCA5; ISSN: 0009-4374

DT Journal

LA French

L5 ANSWER 34 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN

TI Analogs of 8-azainosine

GI

AB Reaction of 8-aza-6-(methylthio)purine [6332-11-2] with 2,3,5-tri-O-acetyl-D-ribofuranosyl chloride [40554-98-1] gave a mixture of position isomers which was chromatog. separated and appropriately treated to give 8 I (R = NH2, SMe, SEt, OMe, OEt, NHBu, NHCH2CH:CMe2, SH) and 2 II (R = NH2, SMe). All I inhibited the growth of H.Ep. Number 2 cells in culture while II were inactive. The most active compound was 7-(methylthio)-3-β-D-ribofuranosyl-3H-1,2,3-triazolo[4,5-d]pyrimidine (I, R = SMe) [61038-38-8]. Three I and a rearrangement product of the thiol (I, R = SH) [38874-48-5], N-β-D-ribofuranosyl[1,2,3]thiadiazolo[5;4-d]pyrimidin-7-amine [61038-43-5], had antileukemic activity.

AN 1977:25937 CAPLUS

DN 86:25937

TI Analogs of 8-azainosine

AU Elliott, Robert D.; Montgomery, John A.

CS Kettering-Meyer Lab., South. Res. Inst., Birmingham, AL, USA

SO Journal of Medicinal Chemistry (1977), 20(1), 116-20

CODEN: JMCMAR; ISSN: 0022-2623

DT Journal

LA English

L5 ANSWER 35 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN

TI In vitro evaluation of the cytotoxic activity of nitrosoureas

GI For diagram(s), see printed CA Issue.

AB Of the 5 nitrosoureas tested using the proposed neoplasm inhibitor screening method, only 1-(2-chloroethyl)-3-(2',3'-isopropylideneribofuranosyl-5'-p-nitrobenzoate)-1-nitrosourea (I) [54138-84-0] and 1-(2-chloroethyl)-3-(2'-deoxyglucopyranosyl-1',3',4',6'-tetraacetate)-1-nitrosourea [54275-78-4] showed activity that was equal to or greater then clin. used nitrosoureas. The proposed method involved the counting of 51Cr [14392-02-0] released by lysis of prelabeled HeLa-S3

cells incubated with the test compound AN 1975:118802 CAPLUS DN 82:118802 ΤI In vitro evaluation of the cytotoxic activity of nitrosoureas Serrou, Bernard; Delor, Bernard; Reme, Thierry; Montero, Jean L.; Imbach, Dep. Immunol. Clin. Exp., Hop. St-Eloi, Montpellier, Fr. CS SO Comptes Rendus des Seances de l'Academie des Sciences, Serie D: Sciences Naturelles (1974), 279(8), 703-6 CODEN: CHDDAT; ISSN: 0567-655X DTJournal French LA => d his (FILE 'HOME' ENTERED AT 17:49:07 ON 04 DEC 2006) FILE 'REGISTRY' ENTERED AT 17:49:44 ON 04 DEC 2006. Ll STRUCTURE UPLOADED L214 S L1 L3 2521 S L1 SSS FULL FILE 'CAPLUS' ENTERED AT 17:50:16 ON 04 DEC 2006 L4 51 S L3/THU 35 S L4 NOT PY>2005 L5 => 'log hold COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 87.56 254.71 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION

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